

Legislative Council Panel on Housing
Housing Authority's Quality Housing Reform

Purpose

This paper updates Members of progress in implementing the Housing Authority's Quality Housing Reform.

Background

2. To improve the built quality of public housing, the Housing Authority introduced in April 2000 the Quality Housing Reform, which comprises 50 Quality Housing Initiatives spanning the entire public housing delivery chain. As at end October 2002, we have already proceeded to implement 48 Quality Housing Initiatives, of which 35 have been fully implemented and 13 have been partially implemented or launched on a pilot basis. The remaining two Initiatives will be launched to synchronise with the recommendations of the Review of the Institutional Framework for Public Housing. The implementation status of all the 50 Quality Housing Initiatives is set out at Annex.

3. The following paragraphs summarise our achievements so far.

Quality Products and Productivity

4. To ensure the safety standard of piling works, we have integrated all the recommendations from the Investigation Panels on Tin Chung Court and Yuen Chau Kok into our new piling process. We have :

- (a) strengthened site inspection procedures and manpower resources of the project teams, with the deployment of resident engineers to all piling sites;
- (b) rationalized risk management and allocation by enhancing the scope and intensity of pre-tender ground investigation, widening the use of engineer's design, and reducing the severity of consequences of delays to remove the incentive to sacrifice quality for economic gains;

- (c) established Housing Authority's own lists of piling and ground investigation contractors, and strengthened list management through introduction of the piling contractors' Performance Assessment Scoring System (PASS) ;
- (d) strengthened piling specification and enhanced the objectivity of final testing and acceptance criteria;
- (e) increased the transparency of subcontracting and restricted multi-layered sub-contracting on piling to no more than one layer; and
- (f) strengthened the piling contractor's supervision and control over sub-contractor's works.

5. Procurement is a key factor in the public housing development process. By virtue of the reform initiatives, we are now giving a much greater emphasis to quality product and services in the selection of our business partners. We have implemented the following initiatives :

- (a) We have enhanced the practices for selection of major consultants through an enhanced two-envelope system, with the ratio of technical proposal to fee proposal adjusted to 80:20. We will consider only the top-three technical proposal scorers in the evaluation and selection exercise to obviate indiscriminate fee bidding;
- (b) We have put in place a direct appointment system as opposed to the architect-led consultancy to clarify the line of command and areas of responsibility of consultants of various disciplines;
- (c) We have introduced the "Premier League" Scheme to secure competent building contractors and launched the new PASS¹ 2000 for enhancing objectivity of contractors' performance assessment;
- (d) We have launched building services PASS in 2001 and conferred preferential tendering opportunities for building services works since September 2002;

¹ PASS denotes the Performance Assessment Scoring System developed and implemented since early 90's to measure the performance standard of contractors in Housing Authority projects on an objective, consistent and quantifiable manner.

- (e) We have enhanced the Preferential Tender Award System² (PTAS) for building works to maintain a balance between low tender prices and good performance records in selecting building services installation contractors;,
- (f) We will extend PTAS to building services installations tenders issued from December 2002 onwards, and we will also take into account the life cycle maintenance economics of lifts and escalators when considering contract award;
- (g) We are piloting the PASS in some selected piling contracts to prepare for a full-scale implementation. If the full-scale implementation is found satisfactory, we will extend the PTAS system to piling works;
- (h) We will exclude exceptionally low bids from contractors or consultants where there is inexplicable doubt on tenderer's ability to deliver; and
- (i) We are actively exploring alternative means of procurement such as Guaranteed Maximum Price/Open Book contracting to enable early integration of design and construction and to give the best overall value for money.

Quality Services and Systems

- 6. We have further reinforced our on-site supervision as follows :
 - (a) We have enhanced the provision of supervisory staff to all sites to ensure that flats completed during the peak production are of the required standard. We will keep reviewing the provision of site inspectorate staff and allow flexible staff deployment in various work stages in new works construction;
 - (b) We have strengthened on-site supervision by providing resident engineers to all piling sites and resident professionals to complex building sites;

² Under the PTAS, considerations are given to past performance records of respective contractors in addition to tender prices, in a weighted and quantified manner.

- (c) We have been providing induction and refresher training to all in-house and consultants' site staff, in particular those deployed on piling inspections, to refresh and update their technical knowledge and uphold competence;
- (d) We have identified designated sample flat in 2000/01 to provide realistic acceptance standard for contractors to follow; and
- (e) We have prepared a revised and streamlined quality management system, which is result-oriented and more flexible, due for launching in December 2002.

7. Further to assuring a high quality acceptance standard that meets customers' and public expectation, we have put in place customer services teams during handover of flats to ensure that defects are dealt with speedily. To boost customers' confidence in our quality production, we have provided structural safety guarantee to Home Ownership Scheme purchasers.

Third Party Control

8. To introduce an objective third-party scrutiny on Housing Authority's developments, we have been examining in collaboration with the Government the various options of bringing Housing Authority's developments under the statutory ambit of the Buildings Ordinance. The proposal will have wide implications on legality, technicality, resources, programming and staffing. In the meantime, we have implemented the following interim measures :

- (a) We have established an Independent Checking Unit directly under the Director of Housing to conduct third party vetting since November 2000;
- (b) We have been progressively aligning the relevant Housing Department specifications, project procedures and practices with Building Department's requirements;
- (c) We have strengthened administrative control over accountability by designating equivalent Authorized Persons/Registered Structural Engineers in projects handled by consultants and equivalent Authorized Signatories/Technical Directors from contractors;

- (d) The Independent Checking Unit has been vetting General Building Plans, Foundation Plans, and Drainage Plans, with a formal process of plan approval and issue of consent to commence work. Since April 2002, the checking has been extended to cover Demolition Plans, Superstructure Plans, Excavation and Lateral Support Plans and Ground Investigation Works;
- (e) The Independent Checking Unit is now reviewing existing construction projects approved before the implementation of independent checking, so as to ensure their regulatory compliance; and
- (f) We will keep providing training to our staff on Buildings Ordinance.

9. The checking process is modeled on that of the Buildings Department. Thus far, the work of Independent Checking Unit has been progressing satisfactorily and regular liaison with the Buildings Department is continuing. We are progressively extending such checking to cover the subsequent stages in the construction cycle of a typical housing project.

Quality People

10. To nurture quality people in the construction workforce, we have raised the contract requirements on trade test certification and uplifted their professional status to attract and retain capable personnel.

Partnering

11. To enable various stakeholders to work towards the delivery of quality housing, we are using the partnering approach as an effective tool to establish and reinforce co-operation among all parties. Major initiatives are :

- (a) We have introduced dispute avoidance and resolution mechanisms into the relevant construction contracts;
- (b) We have strengthened the project management function and established more channels to facilitate communication;
- (c) We have strengthened our consultant management function to promote effective dialogue and better understanding with our consultants;

- (d) At project level, we are conducting partnering workshops on all new construction projects to foster good team spirit among project team members, contractors and sub-contractors, and to boost their sense of commitment to quality, safety, environmental protection and ethical integrity;
- (e) We have conducted the Second Annual Review on the effectiveness of project partnering in promoting team-building and enhancing co-operativeness in September 2002. The review reflected substantial improvements in communication, co-operation and trust between project teams and contractors, evidencing that partnering spirit is progressively enrooted within the construction industry;
- (f) We have conducted Post Project Completion Review Workshops for seven recently completed housing projects. The review workshops have been very successful in tapping constructive feedback on construction, project implementation, hand-over and post completion services. The feedback will be taken into consideration in the implementation of housing projects in future; and
- (g) We have been working with the industry for productivity gain and launching pilot projects to promote wider use of prefabrication, information technology, “green” and innovative design.

Effectiveness of the Quality Housing Reform

12. The 50 Quality Housing Initiatives cover all essential aspects of public housing, including design, procurement, contract arrangements, specifications, building control, supervision, completion, partnering and customer services. These reform measures are intended to improve all essential aspects of public housing development involving all relevant stakeholders. By embarking on these reform measures, we are now better positioned to assure the quality of our products and service delivery. Our direction has been endorsed by the Construction Industry Review Committee in its report published in January 2001.

13. The implementation of the 50 Quality Housing Initiatives has brought about some initial success. The quality and compliance of Housing Authority piling projects with the safety and performance standards are safeguarded and well assured, as evident from the piling works that have been completed since April 2000. Improvements are noted in the built quality of the flats completed during the production peak with building contractors' PASS scores improving by

10% as at end-December 2001. Despite a record-high housing production in 2000 and 2001, there was a 30% drop in the number of building defect complaints from our customers. The achievements can be attributed to the success of various reform measures to address immediate concerns, particularly revamping the piling process, strengthening site supervision and final acceptance standard, enhancing customers' services, and launching the comprehensive integrity plan. We will keep exerting our best effort in partnering with various stakeholders to ensure sustained improvements on these fronts.

14. There are reform measures being tried out by way of pilot projects or launched as interim measures pending the final arrangement. We are convinced of the efficacy of these initiatives in improving our design, procurement and tendering practices, contract arrangements, specification, independent third party vetting, dispute avoidance and speedy resolution, and in turn our product quality and service delivery. In the meantime, we will closely monitor the implementation process, update and fine-tune the proposal to achieve the desired effect in partnership with various stakeholders.

15. Some reform measures, like the initiatives relating to uplifting professionalism and improving productivity, require the industry, Government and the Housing Authority to partner together to bring them to fruition. With the establishment of the Provisional Construction Industry Co-ordination Board in September 2001, we will continue to put our effort jointly with the industry and various stakeholders to bring about industry-wide improvement.

Conclusion

16. The Housing Authority and Housing Department are fully committed to providing affordable quality housing through sustained improvements in the public housing development and construction industry. We will also continue to work together with our business partners to achieve this long term objective.

Housing Department
December 2002

Implementation Plan Phase I

(As at 30 November 2002)

Pillar 1 - Providing Quality Products and Services to Customers		
I.1	To provide a 10-year structural guarantee to all Home Ownership Scheme and Private Sector Participation Scheme developments from the date of completion. (Rec 21)	I
I.2	To establish an intake hot-line so that tenants/owners may report building defect conveniently. (Rec 41)	I
I.3	To require contractors to rectify defects after in-take speedily through setting up Customer Service Teams, adjusting the release of retention money by the HD and extending the defect liability period to 2 years. (Rec 20)	I
I.4	To introduce short-term measures to address the production peak, such as outsourcing final flat inspection to ensure consistency of handover standard. (Rec 40)	I
Pillar 2 - Revamping the Piling Process		
I.5	To introduce short-term measures for safeguarding the quality of piling works. (Rec 37)	I
I.6	To improve the quality of piling works in the long run. (Rec 38)	I
Pillar 3 - Reinforcing Site Supervision		
I.7	To reimburse site supervision cost for providing extra staff for enhanced requirements to safeguard the quality of supervision. (Rec 42)	I
I.8	To deploy and maintain sufficient and competent supervisory staff by the HD, consultants and contractors on all sites during project implementation. (Rec 17)	I
I.9	To strengthen on-site supervision by providing resident professionals for piling and large-scale building projects. (Rec 16)	I
I.10	To streamline handover inspection procedures and define clear acceptance authority during project completion with a view to providing clear and consistent project handover standards to contractors. (Rec 19)	I
I.11	To provide induction training to inhouse and consultant site staff to reinforce site supervision. (Rec 43)	I
Pillar 4 - Reforming Listing and Tendering Practices		
I.12	To secure competent consultants from the tendering system. (Rec 12)	I
I.13	To secure competent contractors from the tendering system. (Rec 11)	I
I.14	To enhance the objectiveness and independence of the disciplinary mechanism. (Rec 10)	U
I.15	To strengthen the representativeness and coverage of building contractors' performance appraisal system. (Rec 8)	I
I.16	To put PASS 2000 on trial for evaluating its effectiveness. (Rec 44)	I
Pillar 5 - Establishing a Partnering Culture		
I.17	To reinforce the partnership relationship between the BC and the HD by reviewing BC's structure and operations. (Rec 46)	U
I.18	To reinforce stakeholders' commitments in delivering quality housing through drawing up a Quality Partnering Charter and highlighting their participation in each project by publicizing their names in sale brochures and completed developments. (Rec 1)	I
I.19	To clearly define key stakeholders' roles and responsibilities and to maximize benefits of their contributions and interaction. (Rec 2)	P
I.20	To strengthen the communication channels with key stakeholders at the strategic level through establishing an annual partnering conference by the HA and regular workshops by the HD's directorate staff. (Rec 4)	I
I.21	To reinforce the partnering spirit with contractors and consultants during project implementation through setting up partnering meetings and review workshops by the HD's project teams at the commencement, implementation and completion stages of the project respectively. (Rec 5)	I
I.22	To allow sufficient time for contractors to deliver quality housing by extending the normal construction period of new piling and building works by 1 and 2 months respectively. (Rec 32)	I
I.23	To revise contractual arrangements for achieving more equitable risk-sharing. (Rec 3)	I
I.24	To establish 'Site Works Forum' for quick resolution of site problems. (Rec 45)	I
Pillar 6 - Re-engineering Departmental Operations		
I.25	To reform the operations of the HD's Development and Construction Branch. (Rec 34)	I

Already Implemented (I) =22, Partially Implemented/Launched as Pilot System (P) = 1 , In progress(U) = 2

Implementation Plan Phase II

Pillar 7 - Reinforcing Partnering Culture		
II.1	To resolve disputes speedily during project implementation through the use of adjudication and/or Dispute Resolution Advisers in large-scale building contracts. (Rec 6)	P
II.2	To tap customer feedback more proactively for continuous improvements. (Rec 7)	I
II.3	To strengthen the appraisal system for consultants to enhance its objectivity and consistency and to draw up clear guidelines for performance evaluation. (Rec 9)	I
Pillar 8 - Enhancing Quality Monitoring Assurance		
II.4	To identify “designated sample flats” to provide realistic acceptance benchmarks for contractors to follow during construction and to produce video tapes/CD ROM for demonstrating desirable building procedures/methods. (Rec 13)	I
II.5	To draw up a list of milestone check-points for monitoring contractors’ progress and to link up the achievement with performance appraisal and contract payments. (Rec 14)	I
II.6	To require contractors and consultants to submit Quality Supervision Plans on project management proposals. (Rec 15)	P
II.7	To explore the introduction of a quality warranty system by contractors. (Rec 22)	I
Pillar 9 - Reinforcing Third Party Control		
II.8	To introduce an objective third-party scrutiny on the HA’s buildings by putting them under the control of the Buildings Ordinance. (Rec 18)	P
Pillar 10 - Uplifting Professionalism		
II.9	To consider requiring contractors to employ contract workers in core trades by themselves and through their nominated sub-contractors and domestic sub-contractors. (Rec 23)	P
II.10	To support the implementation of the Construction Workers’ Registration System for enhancing the industry’s professionalism. (Rec 24)	P
II.11	To liaise with training authorities in providing more site management and public housing-oriented courses and continuous training opportunities for workers. (Rec 25)	P
II.12	To uplift the professional qualifications for site supervisory staff and to increase the proportion of trade-tested workers from 35% to 60% in 3 years through contract requirements. (Rec 26)	P
II.13	To strive for better site safety records by implementing the “Pay for Safety Scheme”, stipulating the minimum threshold for safety provision budget in contracts and strengthening site safety requirements in tender assessment. (Rec 27)	I
II.14	To provide better working environment for workers by upgrading relevant contract specifications. (Rec 47)	I
Pillar 11 - Improving Productivity		
II.15	To promote the wider use of mechanized building process, including system formwork and prefabricated building components. (Rec 28)	P
II.16	To promote research within the building industry (Rec 29)	I
II.17	To facilitate the development of an integrated production process. (Rec 30)	P
II.18	To support the formation of an Organised Specialist Sub-contractors System and the employment of contract workers for tightening up control over sub-contracting. (Rec 31)	P
II.19	To commission a consultancy study to analyze the causes for the relatively high construction costs for residential developments. (Rec 33)	I
II.20	To plan for a pilot “Green Estate” for developing the concept of sustainable development. (Rec 35)	I
II.21	To reduce construction waste and improve the environment. (Rec 36)	I
II.22	To work with other stakeholders to uphold the industry’s ethical integrity. (Rec 39)	I
II.23	To enhance the specification system to take on board new trade practices, reduce documentation and allow flexibility by professionals (Rec 48)	P
II.24	To explore ‘Design, Build, Operate, Transfer’ (DBOT) Concept. (Rec 49)	P
II.25	To establish a systematic mechanism to steer the overall research strategy and oversee the use of HA Research Fund. (Rec 50)	I

Already Implemented (I) =13, Partially Implemented/Launched as Pilot System (P) =12, In progress (U) =0